

Oral hygiene device

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Abstract of DE 3529953 (A1)

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A basic body resembling a toothbrush has means for receiving an insert on its top part for oral hygiene, the insert comprising a carrier and a bag-like pack. The pack contains herbs or the like for materials intended for oral hygiene which act through the permeable film wall of the pack in the oral cavity. The top part is provided, in particular, with bristles like a toothbrush which interact with the insert; however, it can also be designed without bristles.

The invention refers to an apparatus to the mouth hygiene, and in particular on an apparatus, with which a packing from herbs and/or corresponding releasable loose or pasty certain to the mouth care materials the similar use of a toothbrush to the use comes.

The health-promoting and maintaining influences of herbs both with inner and with outside application are actual known. The inner application of herbs made usually in the form of herb dte, while the outside application in the form of bath salts, Kompressen or such made. For this already proposed (GM 84 23 841) became, a herb packing existing from an interior the receptacle of herbs formed bag from plastic sheet of the applicant, which is provided by passage openings at least in a portion with a variety to thus out-arrange that the plastic sheet in the region of each passage opening this opening for exhibiting and over a surface side of the plastic sheet forms foregoing projection, and that the projections associated of passage openings manage a first group outward over the outer surface of the bag and a second group the projections associated of passage openings over the inner surface of the bag into the interior of this bag in-rich. A such herb packing becomes z. B. in the manner applied that it is rubbed external against the skin which can be treated that them become as bath water additive used we that them as Komprese or smell cushion used, or such a thing.

The hygienic mouth care enjoys of increased popularity; its application made major liquid in the form of mouthwashes or other one mouth flushing. This type of the application is relative pedantically and time-consuming, however also relative ineffectively, so that a treatment frequent is omitted.

Object of the invention is it to make and make packings with herbs or such a thing available more applicable in such a way in an apparatus that it on particularly simple, convenient and effective manner the mouth hygiene used to become to be able.

This becomes according to the invention with that features of the claim 1 achieved. Other embodiments of the invention are subject-matter of the Unteransprüche.

The apparatus after the invention is in form of a toothbrush alternatively with or formed without bristles; that head portion of the brush body exhibits provisions to the receptacle the packing from herbs and/or corresponding releasable loose or pasty materials certain to the mouth care (of appended short) female use designated as "herbs". For example the carrier with the herb packing becomes and/or. the herb container, however which becomes herb cartridge, which herb cushions or such a thing into a schitzförmige recess of the head portion of the brush body pushed in, whereby the herb packing and the carrier form an unit, which can represent a way who fine set,

or the carrier with the herb packing in other manner with the base member connected, z. B. by push buttons printed, with the help of a detention link on the base member fixed or such a thing.

The herb packing can become alone or in connection with a bristle arrangement applied, whereby in latter cases between two bristle rows a herb packing provided can however be or two or more bristle rows are provided, which take up a herb packing between itself. The herb packing can be in other embodiment of the invention also on the top and the underside of the head portion of the base member arranged, whereby also bristle rows on both broad sides of the head portion can be attached.

That the herb packing female use is so formed that he of a support member and one consist with this fixed connected herb packing, whereby the support member serves for the attachment of the container with the base member, while the herb packing with the teeth and/or the oral cavity in connection becomes brought. In the frame of instant invention it is also possible to arrange the bristles to each other on the one hand and the herb packing on the other hand rectangular.

In other embodiment of the invention the herb packing can be in form of the container, the cartridge, the cushion or such also so formed that it in form of a plate on the head portion of the base member fitted and/or. in recesses of this base and itself thereby over the entire head portion or a substantial portion of this head portion extended is pushed in. For example the use is in the center high formed as at the side surfaces, so that the surface of the use is curved, so that it is the form of the oral cavity adapted.

Appended one becomes the invention in connection with the drawing on the basis embodiments explained. It shows:

Fig. 1 a perspective view of the bifurcated base member,

Fig. 2 an use for this base member,

Fig. 3 a cross sectional view by use and base member along the cut line II,

Fig. 4 another embodiment of a base member after the invention with use, in perspective view,

Fig. 5 a sectional view along the line II-II,

Fig. 6 a sectional view by a modified embodiment of base member and use,

Fig. 7 a schematic representation of the use after Fig. 6 in perspective view,

Fig. 8 an other embodiment of an use after the invention, in perspective view,

Fig. 9 a sectional view along the line III III of the use after Fig. 8, and

Fig. 10 a cross sectional view by another embodiment of the bifurcated base member with use.

The bifurcated base members 1 after Fig. 1 exhibits one handle part of 2 and head portion a 3.

The base member 1 is in principle formed after type of a toothbrush, whose head portion takes up

bristles. That head portion 3 of this toothbrush-like base member 1 consists of tines 4, 5 from each other by a gap 6 with the width the A separate is, and an underlying plate shaped part 7, whose top is by a continuous slot 8 with a distance D of the underside of the tines 4, 5 separate.

The tines 4, 5 and the plate 7 are preferably integrally formed to the stem at the transition 9 2

connected with one another. Gap 6 and slot 8 serve 10, which exhibits container, cartridge, one cushion or such 12 for the receptacle of an use. The use 10 exists after Fig. 2 from a plate shaped

carrier 11, with that the cushion, the cartridge, which is container or such connected. The cushion

12 possesses a hole foil 13, which encloses a herb packing. The hole foil 13 is for example in the

manner formed, as shown in DBGM 84 23 841 described and. The herb packing can exhibit a

kind of herb or several kinds of herb in mixture, whereby the used herbs z. B. for the care of the mouth area, to the Linderung of wound sites, in addition, for the care of the teeth, present in the

mouth area, certain is. In place of or additional of herbs can do other to the mouth care suitable

loosely, z. B. particulate, or pasty materials used become, in waters and/or. Salivas are more

releasable and on convenient manner - in the bag and/or. Container entrapped - by means of

brush on the teeth and/or. the inner surface of the mouth area applied to become to be able.

The plate shaped carrier part 11 is so formed that its width and/or. The thick width of the

bifurcated round body 1 and/or. corresponds to the distance D between plate 7 and tines 4, 5, so

that the carrier 11 can be pushed in into the gap b and taken out again. The use 10 is preferably

thereby as one-way package formed, those after use, D. h. after care and/or. Treatment of the oral cavity is thrown away. The use 10 can become however alternatively also several times used.

The permeable foil 13 of the packing 12 exhibits preferably micro punchings 14, in the

maintaining, lindernde desired through or such action on the oral cavity exerted becomes. Closer

dealing with structure and content of the cushion, the container, the cartridge or such a thing is

not in instant invention required, since this subject-matter of the patent rights specified above is.

With the embodiment after Fig. 3 is the two tines 4 and 5 with the underlying plate 7 contrary to the formation after Fig. 1 by vertical bars and/or. Walls 14, 15 connected with one another. The embodiment after the Fig. only those exhibits 1-3 the herbs female connected packing 12 fixed with the use 10 in connection with the bifurcated base member.

The embodiment after Fig. a bifurcated base member 1, the corresponding base member 1 exhibits 4 and 5 after the Fig. 1 and 3 constructed is. Handle part of 2 and head portion 3 are corresponding formed, likewise the use 10. On the tines 4 and 5 however in each case a bristle arrangement 16, 17, preferably in form the container 12 enclosing or partly enclosing row of bristles 16, 17 arranged, those after type of a toothbrush with the base member 1 and/or with this embodiment. the tines 4, 5 attached are. A proper replacement of the use after 10 in the Fig. 1 to 3 represented type makes it for required that the bristles 16, 17 not in to the receptacle of the carrier 11 certain space 18 engage, so that an easy insertion and withdrawal are ensured.

With a remark form after Fig. 6 is in the center of the head portion 3 bristles 19 provided, to container, cartridge, one cushion or such 20, 21 follows to the left and/or to the right in each case. The containers 20, 21 are similar 22 connected fixed with the preceding embodiments with a plate shaped carrier as, which is in the slot 23 of the head portion 24 displaceable guided. With this embodiment is contrary to the representation after Fig. 1 and/or. 4 that head portion 3 with tines 4, 5 does not provide, but the bottom plate 7 extending over the whole width of the head portion a corresponding, over the whole width of the head portion 3 extending top plate 24 associated, is the one middle row of bristles 19 likewise takes up themselves and on the left of and/or right from the bristle row 19 slot shaped recesses 25, 26 possesses, by those the approaches 27, 28 the container 20, 21 guided connected with the carrier 22 is. The use, existing from the two containers 20, 21 and the carrier 22 are in Fig. 7 isometric and schematic with 29 shown.

Fig. an other embodiment of an use 30 shows 8, with which a support plate 31 on their top and on its underside a container 33 takes up a container 32. The support plate 31 is formed, in such a manner thereby over the limitations of pages of the upper and the lower container 32, 33 outside, that the lateral edges of the support plate 31 are flange-like in an head portion of the bifurcated base member 1 displaceable arranged, which possesses above and down zinkenförmige members, between which slots to the receptacle of the support plate 31 formed are. The base

member can however with this embodiment, like in Fig. 9 shown, also so formed its that it consists only of a stiel förmigen component 34 without head portion, whereby the head-lateral end of the stem is into a corresponding recess of the support plate 35 inserted.

With an other embodiment of the invention after Fig. 10 is the support plate 36 schwalbenschwanz förmig formed and in a corresponding schwalbenschwanz förmig formed recess 37 of the head portion 38 of a bifurcated base member guided.

1. Apparatus to the mouth hygiene, especially. to the receptacle of a packing from herbs and/or corresponding releasable loose or pasty materials for the treatment of the mouth-inner, certain to the mouth care, characterized by a handle part (2) and head portion (3) an exhibiting base member and one with the head portion (3) connected use (10), which takes up a carrier (11) and the packing (12), which are replaceable fixed on the head portion (3) and whose bag-like envelope (12) is a permeable plastic sheet (13).

2. Apparatus according to claim 1, characterised in that the stiel förmige body (2) with head portion (3) a toothbrush is or toothbrush-similar formed is.

3. Vorrichtung according to claim 1 or 2, characterised in that that head portion (3) of the apparatus (1) a variety of bristles arranged in the head portion (3) (16, 17; 19) and at least these bristles an associated packing (10; 20, 21; 29; 30) exhibits.

4. Apparatus after one of the claims 1 to 3, characterised in that the packing in actual known manner from one with micro punchings (14) provided plastic sheet (12) exists, which takes up the herbs or such a thing and which is so designed that the herbs or such a thing arrive by the micro punchings of the plastic sheet through into the mouth area and/or. into the mouth area in-work.

5. Vorrichtung after one of the claims 1 to 4, characterised in that that head portion (3) bifurcated (4, 5) formed is that the two fork tines (4, 5) exhibit a distance (A) from each other, which serves the packing (12) for the receptacle that in vertical direction to the plane of the fork tines one is in the distance (B) underneath the fork tines (4, 5) arranged plate (7) provided, and that a slot (8) between plate (7) and fork tines (4, 5) is provided to the receptacle of the carrier (11) of the use (10).

6. Apparatus according to claim 5, characterised in that the use (10) a replaceable and/or. One-way construction unit is, whose plate shaped carrier (11) is relative rigid formed as guide element and is on that the packing (12) as flexible cushion fixed connected.

7. In each case a bristle row (16, 17) it exhibits apparatus after one of the claims 1 to 6, characterised in that the fork tines (4, 5) and that the packing (12) between the bristle rows (16, 17) is arranged.

8. Apparatus after one of the claims 1 to 6, characterised in that that head portion (3) of the apparatus a central row of bristles (19) exhibits, and that is arranged to both sides of the bristle row a packing (20, 21) in each case, which are with a support plate (22) so connected that the use (20, 21, 22) is in a slot-like recess (23) of the head portion (24) guided.

9. Apparatus after one of the claims 1 to 6, characterised in that over a handle-like head portion (34) of the apparatus a carrier body (35) displaceable arranged is, and that the carrier body exhibits an upper (32) and a lower (33) packing.

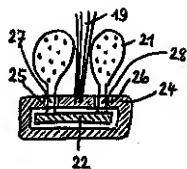


Fig. 6

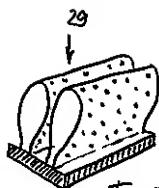


Fig. 7

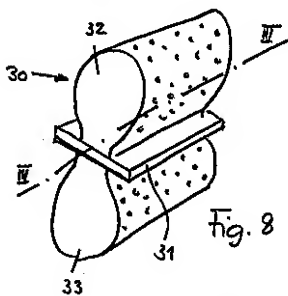


Fig. 8

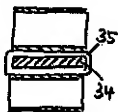
Fig. 9
(III-IV)

Fig. 10